



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/310,508	05/12/1999	THOMAS W. LYNCH	THS003	8928

7590 10/09/2003

GARLICK & ASSOCIATES
PO BOX 160727
AUSTIN, TX 787160727

EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
----------	--------------

2142

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/310,508

Applicant(s)

LYNCH, THOMAS W.

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/28/03 Amendment B.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 20-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to amendment filed 07/28/03, claims 1-50 remain pending of which 20-50 are withdrawn from consideration and claim 1-19 are set forth for examination.
2. Quotation of 35 U.S.C. §103(a), which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.
3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontothanassis et. al. (Kontothanassis) U.S. Patent No. 6,341,339 and Slaughter U.S. Patent No. 6,058,400 in further view of YANAI et. al. (Yanai) U.S. Patent No. 5,742,792.

Regarding claim 1, Kontothanassis teaches substantial features of the invention as claimed (Figs. 1-3), teaching a system/method comprising;

plurality of nodes (110) (i.e. at least two) communicatively coupled with one another via any type of network (120) (col 3/lines 36-43), each node having a respective managed resources (140, 150) (col 3/lines 43-51) comprising data (col 1/lines 59-col 2/line 8);

upon detection of an event that alters the status of a group of data contained in a node (col 2/lines 9-15), event including receiving a fetch (input) operation from a remote node (col 2/lines 15-21) affecting its respective managed resources;

said event that altered the status of the group of data contained in said node is writing (transmitted) to other nodes (col 2/lines 12-15), e.g. a modification of a remote managed resource is transmitted to each other nodes managed resources copies;

each of said other nodes receiving said event that altered the status of said group of data contained in said node, maintaining current data contained in all nodes, ensuring that all nodes and sufficiently updated (col 2/lines 15-41, providing coherence to said system col 2/lines 57-59);

however Kontothanassis does not explicitly teach where said managed resources include instances;

Slaughter teaches means for maintaining coherence of managed resources (abstract) including instances (col 6/lines 24-30, 42-44), receiving input from a local user affecting a respective instance of the managed resource (col 9/lines 3-8, and col 5/lines 66-col 6/lines 9);

however neither Kontothanassis nor Slaughter teach wherein upon a communication link failure between two nodes, communication is prevented or inhibited until the communication link becomes available;

Yanai teaches a system method related to coherency (i.e. data mirroring) among managed resources including at least two nodes, e.g. a primary and secondary node, that are located on a plurality of computer, including upon a communication link failure between two nodes, communication is prevented or inhibited until the communication link becomes available (col 29/lines 38-45, col 30/lines 29-37, col 26/lines 56-63, Fig. 13B steps 651, 652 and 653);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include in existing functional equivalent system, to include a plurality of nodes having respective instances of a managed resource, as taught by Slaughter, motivation would be to implement a cluster-based managed resource system developed from a conventional managed resource system that is easily adapter to other systems with little or no modifications, as taught by Slaughter. One ordinary skilled in the art would be further motivated to implement a recovery operation where a node will continue without transmitting respective actions to the secondary node for storage until an available communication path between each of the at least two nodes is restored, providing a fault tolerant communication link pair between at least two nodes (i.e. primary and secondary) wherein upon either nodes detecting a communication link failure the primary node may continue operation marking all respective input to be stored on the secondary so that with the link path is restored transferring will begin.

Regarding claim 2, managed resources include data (Kontothanassis: col 1/lines 59-col 2/line 1); each node includes a respective instance of the data (Slaughter: col 6/lines 24-30, 42-44); modification made to an instance is made to the each of the other instances in order to maintain coherence (Kontothanassis: col 5/lines 66-col 6/line 13); transmitting respective actions with communication paths between at least two nodes becomes available (Yanai: col 29/lines 38-45, col 30/lines 29-37, col 26/lines 56-63, Fig. 13B steps 651, 652 and 653).

Regarding claim 3, by monitoring modification operations performed in the system modification made to any instance of data of a managed resource of a given are made to other instances of other nodes in the system maintaining coherency (Kontothanassis: col 2/lines 9-27);

Regarding claim 4, modifications made to any instance of a managed resource (e.g. a home copy) are made to each other instances (e.g. twin copy) of the managed instance to maintain coherence (Kontothanassis: col 2/lines 9-28).

Regarding claim 5, nodes having managed resources including files, data bases, configuration files and source files (Kontothanassis, col 1/lines 30-37).

4. Claims 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontothanassis et. al. (Kontothanassis) U.S. Patent No. 6,341,339 and Slaughter U.S. Patent No. 6,058,400 in further view of Choquier et. al. (Choquier) U.S. 5,774,668.

Regarding claims 6 and 10-12, substantially the same as discussed above, managed resources include an instance, (i.e. an object, in object-oriented programming in relation to the class to which it belongs, as known in the art) (Slaughter: col 6/lines 24-30), managed resources in an client-server environment (Slaughter: col 11/lines 12-17, Internet server providing displayable instances of an object class inherently);

however the above teachings do not explicitly teach where the respective instance of a managed resource is a video image;

Choquier teach a plurality of nodes communicatively coupled to one another each having a respective instance of a managed resource (Choquier; col 1/lines 41-44, col 1/lines 66-col 2/line 14, managed an instance of a created object class as known in an object-oriented environment), where each replicated application node within a service group comprises a video image (col 15/lines 13-15, col 19/lines 47-52, Fig. 12).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include instances of managed resources such as video, motivation would be to further extend Kontothanassis applicability to any type of network and Slaughter teachings applicable to any type of file system, motivation would be enable uninterrupted access to any type of service provided by said managed resource by transferring said services from one node to another to increase availability on demand.

Regarding claim 7, instance of the managed resource are modified via an application program (Kontothanassis; col 6/lines 26-30).

Regarding claim 8, system resides in client-server environment (Slaughter: col 2/lines 3-13, suitable for client-server environment col 11/lines 12-15).

Regarding claim 9, said node reside on a client and server node respectively (Slaughter: col 11/lines 12-15).

Regarding claim 13, any of the nodes having managed resources may change their resource and all of these changes are made to the other managed resources (Kontothanassis; col 2/lines 9-41).

Regarding claim 14, actions performed on one node are transmitted to another node (Kontothanassis: col 2/lines 9-41).

Regarding claim 15, actions are stored by the nodes (Kontothanassis: col 2/lines 9-41).

Regarding claims 16-19, actions affecting the managed resource are queried to determine whether they are consistent (Kontothanassis: col 2/lines 42-54, inquiry, step 330, col 6/lines 38-67); actions are time-stamped to determine whether they are consistent (Kontothanassis: col 6/lines 38-67); upon determining that actions are inconsistent these are rejected (Kontothanassis: col 6/lines 38-51).

5. Applicant's arguments filed 7/28/03 with respect to claim 1 limitations as amended have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Prosecution of this application is closed by means of this final office action § 1.113, applicant may request continued examination of the application by filing a Request for Continued Examination of under 37 CFR § 1.114 and providing the corresponding fee set forth in § 1.17(e) for the submission of, but not limited to, new arguments, an information disclosure statement, an amendment to the written description, claims, drawings, or new evidence in support of patentability. Or applicant whose claims have been twice rejected, may appeal from the decision of the administrative patent judge to the Board of Patent Appeals and Interferences under 35 U.S.C. §134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry

Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).



B. Prieto
Patent Examiner
October 4, 2003

MARC D. THOMPSON
MARC THOMPSON
PRIMARY EXAMINER